

Title (en)

PROCESS AND DEVICE FOR THE ELECTROMAGNETIC STIRRING OF CONTINUOUSLY CAST SLABS, ESPECIALLY OF STEEL

Publication

EP 0097561 B1 19870729 (FR)

Application

EP 83401148 A 19830607

Priority

FR 8210844 A 19820618

Abstract (en)

[origin: ES8501266A1] In a continuous-casting method molten steel is continuously introduced into a continuous-casting mold to form therein a strand having a free surface in the mold, a pair of relatively wide faces, and a pair of relatively narrow faces. The mold and the steel therein are continuously cooled to externally solidify the molten-steel strand while leaving same internally molten and the externally solid and internally molten strand is continuously withdrawn from the lower end of the mold. The core of the strand solidifies increasingly as it moves from the mold and terminates downstream of the mold at a pool bottom. At each of a plurality of locations spaced apart about 1 m to 2 m longitudinally along the strand between the mold and the pool bottom a respective magnetic field is formed with the fields passing through the strand from between about 3 m to 7 m beneath the free surface to about 2 m to 6 m from the pool bottom. These fields are displaced transversely of and generally parallel to the side faces of the strand with each field moving opposite to the adjacent field or fields so as to magnetically transversely and oppositely displace respective portions of the molten core of the strand.

IPC 1-7

B22D 11/12

IPC 8 full level

B22D 11/10 (2006.01); **B22D 11/115** (2006.01); **B22D 11/12** (2006.01)

CPC (source: EP KR US)

B22D 11/00 (2013.01 - KR); **B22D 11/122** (2013.01 - EP US)

Cited by

WO2011117479A1; US8011417B2; WO2008003838A1

Designated contracting state (EPC)

AT BE CH DE GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0097561 A1 19840104; **EP 0097561 B1 19870729**; **EP 0097561 B2 19931208**; AT E28586 T1 19870815; AU 1579783 A 19831222; AU 569037 B2 19880121; BR 8303222 A 19840131; CA 1208878 A 19860805; DE 3372722 D1 19870903; ES 523383 A0 19841116; ES 8501266 A1 19841116; FR 2528739 A1 19831223; FR 2528739 B1 19850802; JP H048134 B2 19920214; JP S5954451 A 19840329; KR 840005029 A 19841103; KR 910006065 B1 19910812; MX 159768 A 19890817; US 4562879 A 19860107; ZA 834477 B 19840328

DOCDB simple family (application)

EP 83401148 A 19830607; AT 83401148 T 19830607; AU 1579783 A 19830615; BR 8303222 A 19830617; CA 430377 A 19830614; DE 3372722 T 19830607; ES 523383 A 19830617; FR 8210844 A 19820618; JP 10801283 A 19830617; KR 830002736 A 19830618; MX 19771583 A 19830617; US 50484583 A 19830617; ZA 834477 A 19830617